



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# MYCOLOGIA

VOL. V

NOVEMBER, 1913

No. 6

---

## ILLUSTRATIONS OF FUNGI—XVI

WILLIAM A. MURRILL

(WITH PLATES 102-108)

The accompanying figures represent some of the tough and woody fungi known as polypores. Most of the species of this group grow on dead wood in brackets of various sizes and shapes, the fruiting surface being composed of tubes or furrows. Sometimes the walls of these tubes split with age and the hymenium appears spiny, resembling the hydnums; sometimes the furrows change with age to appear like gills. When the fruit-body is perennial, the tubes are often arranged in layers. The family may be divided into four groups, the resupinates, the annual poroid species, the perennial poroid species, and the agaric-like species. The resupinate species are difficult for the beginner; some of the larger species of the other groups are comparatively easy. Polypores as a class are very destructive to trees and timber. On the other hand, one species possesses medicinal properties, some of the encrusted species supply tinder, and several of the more juicy ones are excellent for food if collected when young. The only species recognized as poisonous is the medicinal one, *Fomes Laricis*, and it is so tough and bitter that no one would think of eating it.

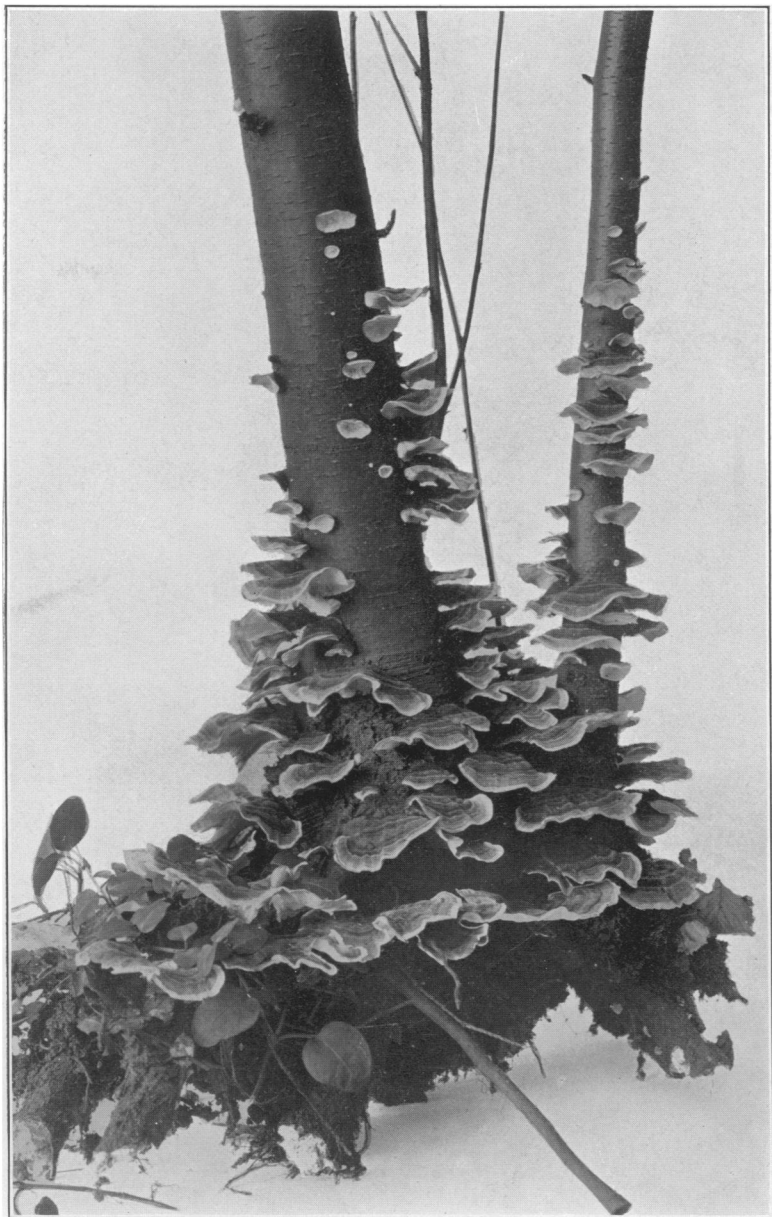
### ***Coriolus versicolor* (L.) Quél.**

MANY-COLORED CORIOLUS

Plate 102

Pileus densely imbricate, very thin, sessile, dimidiate, conchate, 2-4 × 3-7 × 0.1-0.2 cm.; surface smooth, velvety, shining, marked

[MYCOLOGIA for September, 1913 (5: 257-286), was issued Oct. 4, 1913.]



*CORIOLUS VERSICOLOR* (L.) Quél.

with conspicuous, glabrous zones of various colors, mostly latericeous, bay or black; margin thin, sterile, entire; context thin, membranous, fibrous, white; tubes punctiform, less than 1 mm. long, white to isabelline within, mouths circular to angular, regular, even, 4-5 to a mm., edges thick and entire, becoming thin and dentate, white, glistening, at length opaque-isabelline or slightly umbrinous; spores allantoid, smooth, hyaline,  $4-6 \times 1-2 \mu$ .

Abundant everywhere on dead wood, both in temperate and tropical regions, causing decay in tree trunks and often producing root-rot in trees when they are weakened by lack of food or other unfavorable conditions. The photograph is from a young black birch attacked by the fungus.

### ***Coriolus prolificans* (Fries) Murrill**

#### LACERATE CORIOLUS

Plate 103

Pileus exceedingly variable, sessile or affixed by a short tubercle, dimidiate to flabelliform, broadly or narrowly attached,  $2-5 \times 2-6 \times 0.1-0.3$  cm.; surface finely villose-tomentose, smooth, white or slightly yellowish, marked with a few narrow, indistinct, latericeous or bay zones; margin thin, sterile, entire to lobed; context very thin, white, fibrous; tubes 1-3 mm. long, white to discolored within, mouths angular, somewhat irregular, 3-4 to a mm., usually becoming irpiciform at an early stage, edges acute, dentate, becoming lacerate, white to yellowish or umbrinous; spores smooth, hyaline.

Exceedingly abundant at times on dead deciduous trunks from Canada to Florida and west to Wisconsin and Mexico. I have seen oak trunks nearly a hundred feet long entirely covered with the fruit-bodies of this species. The walls of the tubes usually split at an early stage, causing beginners to mistake it for an *Irpex* or a *Hydnum*.

### ***Irpiciporus mollis* (Berk. & Curt.) Murrill**

#### SOFT IRPICIPORUS

Plate 104

Pileus sessile, dimidiate, imbricate, decurrent,  $3-4 \times 4-8 \times 1-3$  cm.; surface white, finely pubescent, azonate, sulcate at times,

often aculeate behind with age; context white, coriaceous, 1–5 mm. thick; tubes soon splitting into teeth, which are 1–2 cm. long, compressed to subulate, slender, more or less pointed, dentate or incised, puberulent to glabrous, white to pale-flesh-colored, about 1 mm. apart at the base; spores globose, smooth, hyaline, 5–7  $\mu$ .

This species occurs rather sparingly on dead deciduous wood in temperate North America. It is interesting because of its close resemblance to the Hydnaceae. The specimens figured were collected on the Garden grounds in August, 1911, growing on the dead top of a red maple fifty feet above the ground.

### **Poronidulus conchifer** (Schw.) Murrill

#### SHELL-BEARING POLYPORE

##### Plate 105. Upper Figure

Pileus thin, coriaceous, dimidiate to flabelliform, usually narrowly attached, conchate, springing from a sterile, cup-like structure, which usually appears on the mature sporophore near the base, 1.5–2  $\times$  2–4  $\times$  0.1–0.2 cm.; surface white to isabelline, with pale-latericeous zones, finely tomentose to glabrous, the sterile portion avellaneous, with narrow, black, concentric lines; margin thin, concolorous, undulate; context very thin, membranous, white, less than 1 mm. in thickness; tubes short, about 1 mm. long, thin-walled, white, mouths angular, irregular, 3 to a mm., edges thin, uneven, dentate; spores ellipsoid, smooth, hyaline.

Very common on fallen branches and dead limbs of elm throughout eastern North America as far west as Kansas. The genus is monotypic and is peculiar in having the fertile portion of the fruit-body develop from a sterile, cup-like growth, which is often found on the back of the mature pileus.

### **Scutigra griseus** (Peck) Murrill

#### GRAY SCUTIGER

##### Plate 105. Lower Figure

Pileus circular, often irregular, convex, 7–12 cm. broad, 1 cm. or less thick; surface glabrous or minutely tomentose, cinereous, slightly darker toward the center; margin thin, concolorous, often

incurved on drying, irregular, undulate to lobed; context soft-fleshy, rosy-gray, about 5 mm. thick; tubes slightly decurrent, 1-2 mm. long, whitish-stuffed when young, white to pale-umbrinous within, mouths subangular, unequal, 2-4 to a mm., edges thin, entire to fimbriate, lacerate with age, white when young, becoming gray or umbrinous; spores subglobose, hyaline, echinulate,  $5-6 \times 4.5-5 \mu$ ; stipe central, thick, short, bulbous at the base, with surface and substance resembling that of the pileus, but darker in color, 4-5 cm. long, 1-1.5 cm. thick.

Found sparingly on the ground in open woods in New York, New Jersey, and Alabama. The specimens here figured were collected by Dr. F. M. Bauer near Amityville, Long Island, in September, 1911. The genus *Scutiger* approaches very near the Boletaceae, but the species are somewhat tougher and dry more easily. Of the dozen or more members of the genus in this country, all except two are very rare and local.

### **Grifola frondosa** (Dicks.) S. F. Gray

#### FRONDOSE POLYPORE

#### Plate 106. Upper Figure

Pileus imbricate-multiplex, 15-40 cm. in diameter; pileoli very numerous, branching from a common trunk, imbricate or confluent, variable in size and shape, dimidiate to flabelliform, 1.5-6 cm. broad; surface smoky-gray, fibrillose, radiate-striate; margin thin, undulate or lobed, strongly inflexed when dry; context white, very thin, tough, fragile, having the odor of mice; tubes white, 2-3 mm. long, mouths circular and regular when young, 3 to a mm., often large and angular with age, edges white, thin, entire to lacerate; spores subglobose to ellipsoid, smooth, hyaline; stipe tubercular, white, connate-rimose.

This large, branched species grows commonly in Europe and North America at the base of oak trees or arises from their roots, on which it feeds. It also attacks the roots of chestnut trees, and in the Italian chestnut orchards it is often allowed to destroy its host because it is much esteemed in that region for food. It must be eaten when young or it will become too tough.

**Daedalea quercina Pers.**

## OAK-LOVING BRACKET-FUNGUS

## Plate 106. Lower Figure

Pileus corky, rigid, dimidiate, sessile, imbricate, applanate, convex below, triangular in section,  $6-12 \times 9-20 \times 2-4$  cm.; surface isabelline-avellaneous to cinereous or smoky-black with age, slightly sulcate, zonate at times, tuberculose to colliculose in the older portions; margin usually thin, pallid, glabrous; context isabelline, soft-corky, homogeneous, 5-7 mm. thick; tubes labyrinthiform, becoming nearly lamellate with age in some specimens, 1-2 cm. long, 1-2 mm. broad, chalk-white or discolored within, edges obtuse, entire, ochraceous to avellaneous.

This species is common on oak stumps and timbers throughout Europe and temperate North America, and is conspicuous by reason of its size and peculiar labyrinthiform fruiting surface, which becomes almost agaric-like with age.

**Elfvigia megaloma (Lév.) Murrill**

## ARTISTS' BRACKET-FUNGUS

## Plate 107

## Plate 108. Upper Figure

Pileus hard, woody, dimidiate, applanate,  $6-15 \times 8-30 \times 1-4$  cm.; surface milk-white to gray or umbrinous, glabrous, concentrically sulcate, encrusted, fasciate with obscure lines, conidia-bearing, usually brownish during the growing season from the covering of conidia; margin obtuse, broadly sterile, white or slightly cremeous, entire to undulate; context corky, usually rather hard, zonate, fulvous to bay, 5-10 mm. thick, thinner with age; tubes very evenly stratified, separated by thin layers of context, 5-10 mm. long each season, avellaneous to umbrinous within, mouths circular, 5 to a mm., whitish-stuffed when young, edges obtuse, entire, white or slightly yellowish to umbrinous, quickly changing color when bruised; spores ovoid, smooth or very slightly roughened, pale-yellowish-brown, truncate at the base,  $7-8 \times 5-6 \mu$ .

Originally described from specimens collected by Ménand in New York City. Found in great abundance throughout temperate North America on dead or diseased trunks or timber of most

deciduous trees, and on conifers in some sections. The tulip-tree here figured bore a number of new brackets each season for several years, while the older ones increased in size. Within the trunk of the tree, the delicate branching threads of the fungus permeated the wood in all directions seeking food and causing decay. In 1912, the tree was found to be so weakened that it had to be cut.

The brackets of this fungus are often collected by amateur artists and used for etching. The accompanying figure is from a specimen recently presented to the Garden by Mr. George E. Pollock. It grew near Lake Placid over one hundred years ago and was etched by a friend of the late James Ten Eyck to represent a view near the latter's camp in the Adirondacks.

***Fomes unguatus* (Schaeff.) Sacc.**

HOOF-SHAPED FOMES. PINE-LOVING FOMES

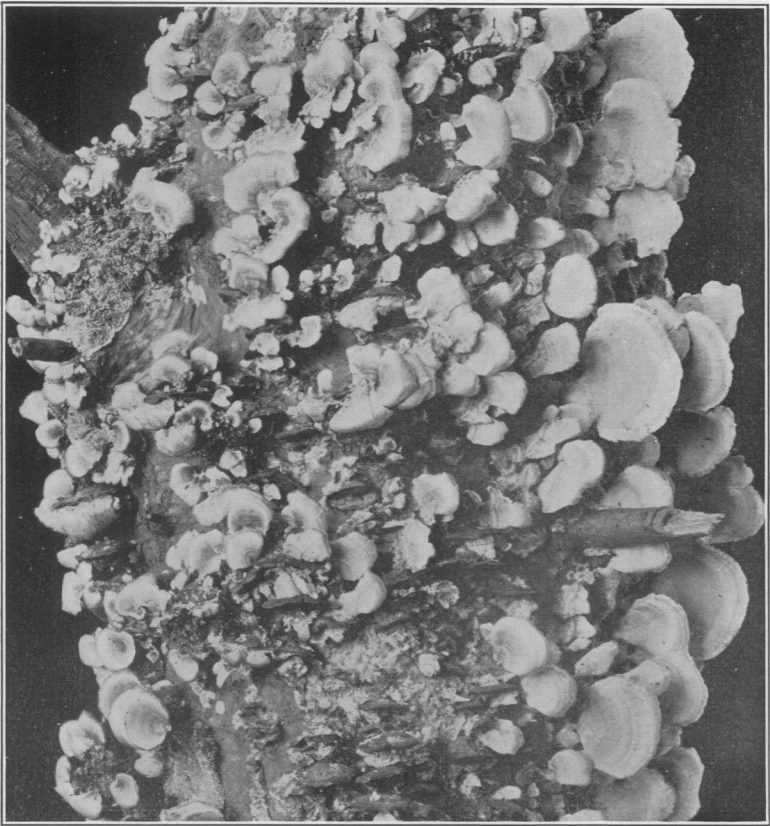
Plate 108. Lower Figure

Pileus corky to woody, unguate,  $8-15 \times 12-40 \times 6-10$  cm.; surface glabrous, sulcate, reddish-brown to gray or black, often resinous; margin at first acute to tumid, pallid, becoming yellowish or reddish-chestnut; context woody, pallid, 0.5-1 cm. thick; tubes distinctly stratified, 3-5 mm. long each season, white to isabelline, mouths circular, 3-5 to a mm., edges obtuse, white to cream-colored; spores ovoid, smooth, hyaline,  $6\mu$ .

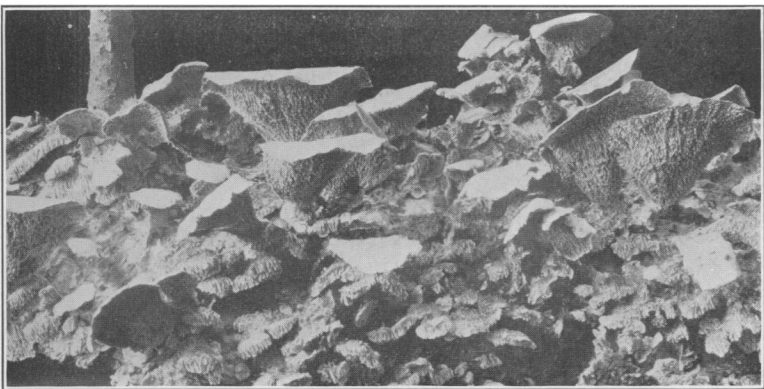
A large species widely distributed in temperate regions on coniferous trees, such as pine and hemlock, and found more rarely on certain deciduous trees growing near its usual hosts.

NEW YORK BOTANICAL GARDEN.



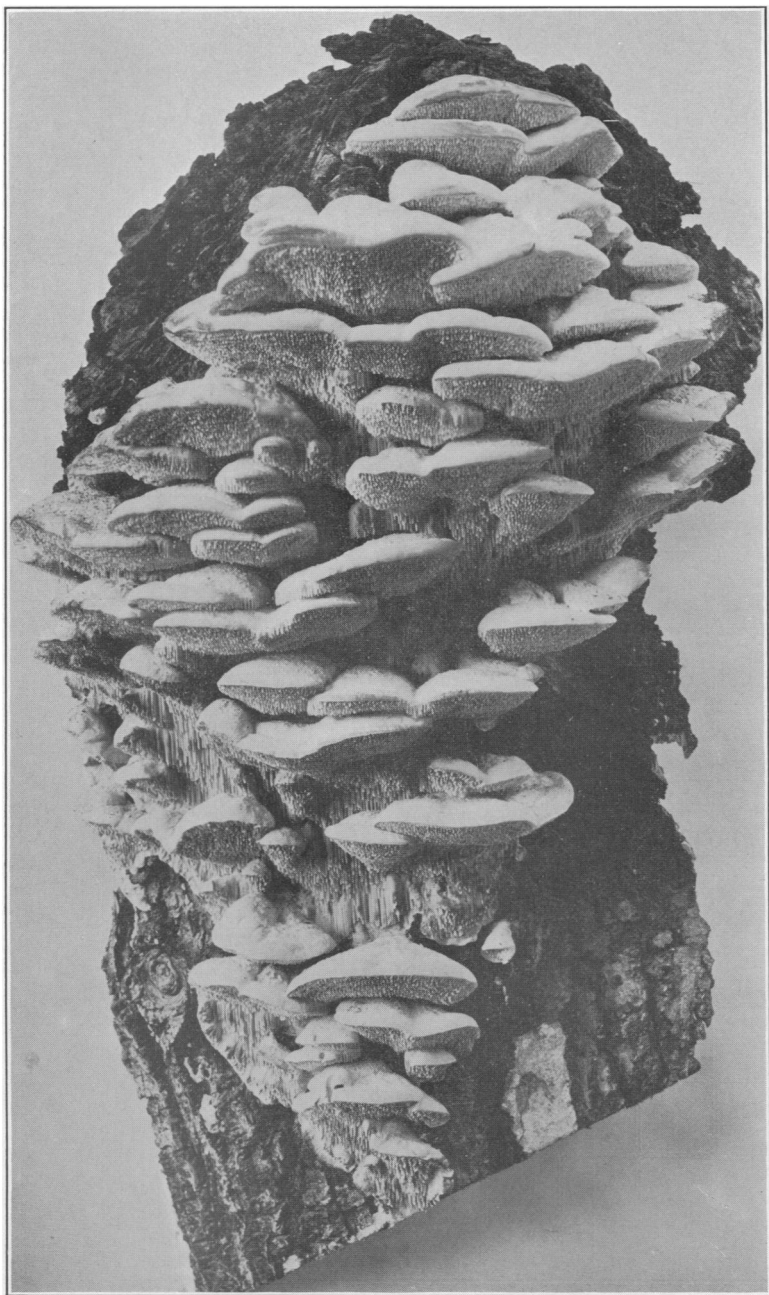


View of upper surface

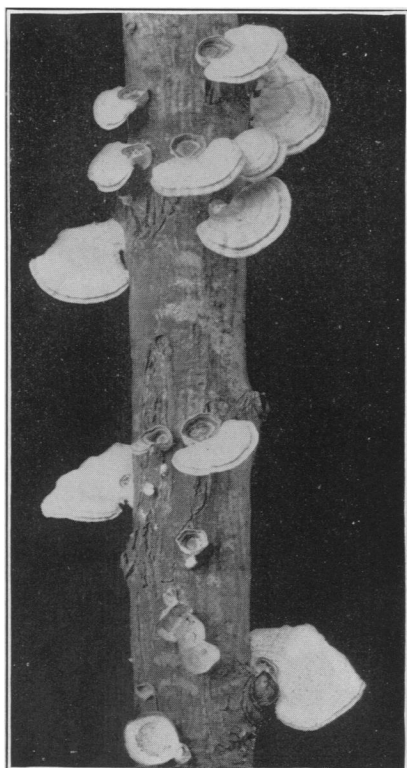
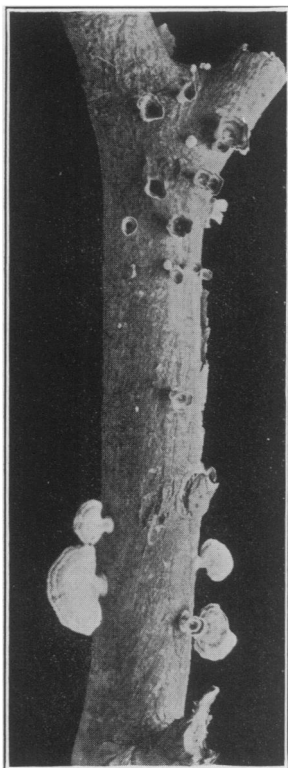


View of lower surface

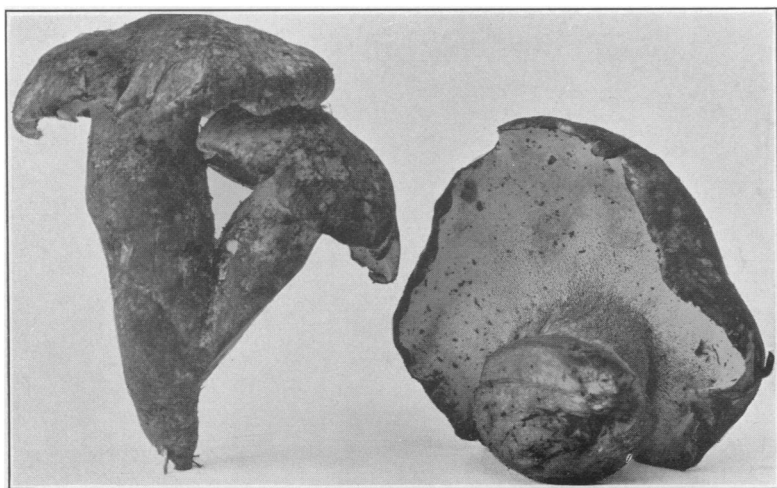
CORIOLOUS PROLIFICANS (Fries) Murrill



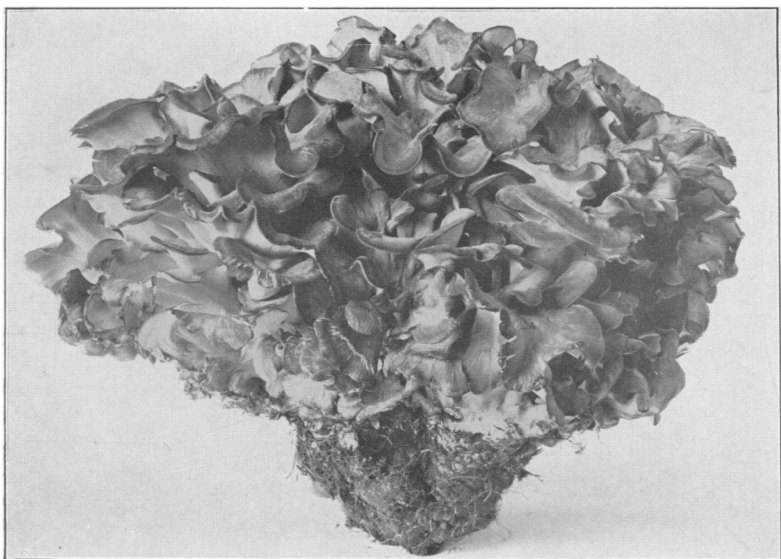
*IRPICIPORUS MOLLIS* (Berk. & Curt.) Murrill



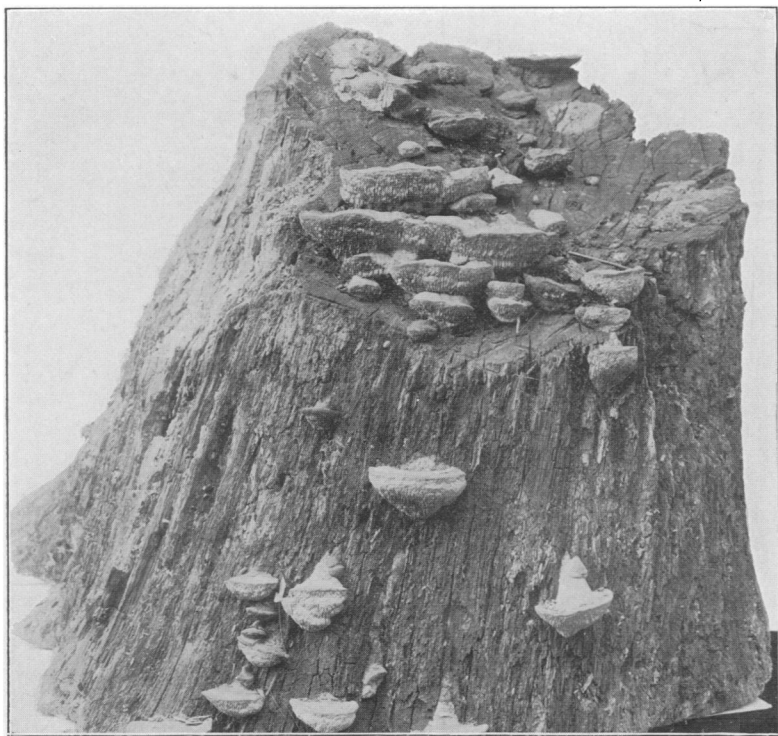
*FORONIDULUS CONCHIFER* (Schw.) Murrill



*SCUTIGRA GRISEUS* (Peck) Murrill



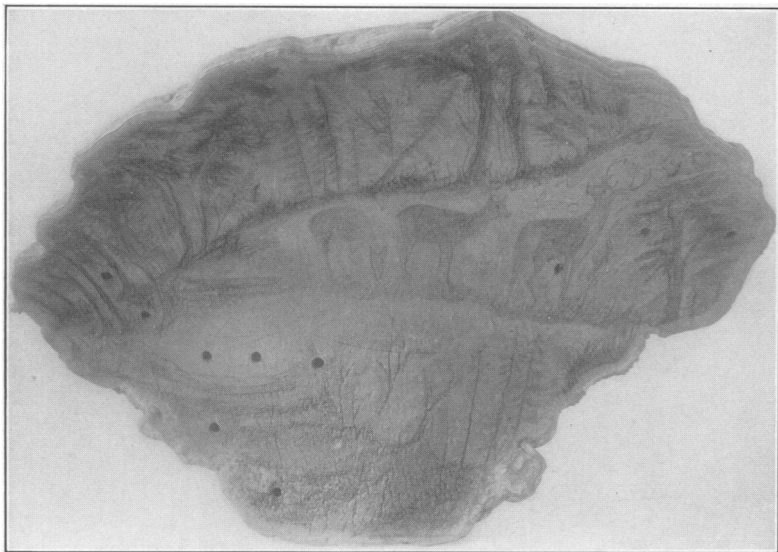
GRIFOLA FRONDOSA (Dicks.) S. F. Gray



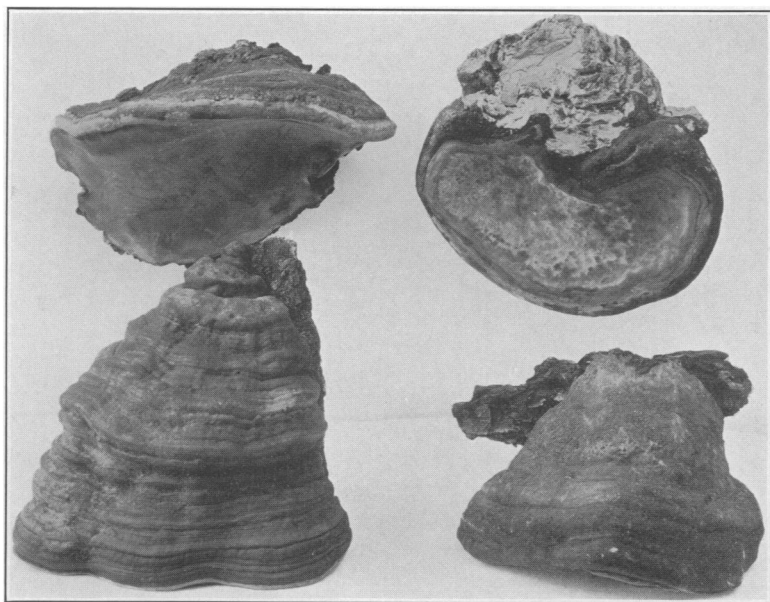
DAEDALEA QUERCINA Pers.



*ELFVINGIA MEGALOMA* (Lév.) Murrill



ELFVINGIA MEGALOMA (Lév.) Murrill



FOMES UNGULATUS (Schaeff.) Sacc.